

REMARKS/ARGUMENTS

I. Status of the Claims

Claims 1, 2, and 4-27 are pending, with claim 3 being canceled, claims 6-10 being withdrawn as drawn to a non-elected invention and claims 26 and 27 being added herewith. Claim 5 has been indicated to be allowable if rewritten as an independent claim.

II. The Present Amendments

The amendments herein add no new matter.

The amendments to claim 1 recite that the subject to whom the inhibitor of soluble epoxide hydrolase ("sEH") is administered has any of certain designated conditions. The recitation is supported throughout the specification, including page 8, lines 29-32 (heart attack and tests showing decreased circulation to the heart), page 3, lines 18-19 (coronary bypass), page 8, line 33 to page 9, line 7 (angioplasty), page 3, lines 18-19 (implanted stent), page 10, lines 15-16 (hemodialysis graft), and page 10, lines 5-6 (vascular graft).

The word "a" before the term "soluble epoxide hydrolase" has been deleted in claims 1, 2, 15, 16, 17, 19, 20, 21, 23, 24, and 25. The term "soluble epoxide hydrolase" refers to a specific enzyme, as noted throughout the specification, including page 4, paragraph 16. Claim 3 has been amended to clarify the invention on derivatives wherein the pharmacophore is bonded to cyclohexyl, such as the embodiments, CDU and DCU, recited in claim 4. Claim 4 has been likewise been amended to focus on the cyclohexyl compounds. The spelling of "epoxide" has been corrected in the claims where required.

New claim 26 recites inhibiting proliferation of vascular smooth muscle cells in a subject by administering an inhibitor of soluble epoxide hydrolase and a *cis*-epoxyeicosatrienoic acid (EET). The claim is supported throughout the specification, including page 19, paragraph 79. New claim 27 recites a method of using inhibitors of sEH to inhibit proliferation of cells with inappropriate cell cycle regulation. The claim is supported throughout the specification, including page 10, lines 30-34.

III. The Office Action

The Action rejects the claims on several grounds. Applicants amend in part and traverse all the rejections. For clarity, the rejections are set forth below in the order in which they appear in the Action, along with Applicants' responses thereto.

A. Rejection under 35 U.S.C. §112, first paragraph

Claims 1-4, and 11-25 are rejected under 35 U.S.C. §112, first paragraph, as allegedly not enabled. According to the Action, the specification is enabling for various specific derivatives of urea, carbamate, or amides, but is not enabled for an inhibitor of soluble epoxide hydrolase ("sEH") for a derivative of a pharmacophore selected from the group consisting of urea, carbamate, or amide.

The Action supports this contention by setting forth the eight factors described in *In re Wands*, 8 USPQ2d 1400 (Fed. Cir. 1988), and contends that, applying these factors, the person of skill could not practice the invention without undue experimentation. In this regard, the Action argues: (1) that the pharmaceutical art is very unpredictable, Action, at page 3-4, (2) that the "claims are very broad due to the vast number of possible compounds [] that are described as being an inhibitor of a soluble epoxide hydrolase," Action, at page 4, (3) that there is insufficient guidance given the practitioner given the number of possible sEH inhibitors and the alleged unpredictability of whether other derivatives of urea will function as sEH inhibitors, Action, at pages 4-6, (4) that the number of working examples is not sufficient given the scope of sEH inhibitors, Action, at page 6, and (5) that undue experimentation would be necessary to practice the invention, given "all of the inhibitor[s] of a soluble epoxide hydrolase that would be enabled in this specification." Action, at pages 6-7.

Applicants traverse. Applicants agree that the Action correctly states the factors set forth in *In re Wands*. Applicants respectfully submit, however, that the factors have not been applied appropriately to the claims under examination. The Applicants respectfully observe that the claims under examination are drawn to methods of using inhibitors of soluble epoxide hydrolase ("sEH"). Many, if not most, of the arguments made by the Action in support of the rejection under §112, first paragraph would be appropriate if the claims were directed to

compositions of sEH inhibitors, but are not properly applied to claims directed to methods of using those inhibitors. The claims under examination are not directed to whether any particular composition is or is not an inhibitor of sEH. Applicants also maintain that the Action understates the guidance provided to persons of skill.

Applicants turn now to a more detailed review of the individual contentions made in the course of the rejection.

1. The Alleged Unpredictability of the Art

The Action alleges that the unpredictability in the pharmaceutical art is high. In this regard, the Action cites *In re Fischer*, 166 USPQ 10 (CCPA 1970), as supporting the thesis that biological compounds often react unpredictably under different circumstances, and *Ex parte Sudilovsky*, 21 USPQ2d 1702 (BOPAI 1992)¹ as holding that an invention directed to using angiotensin converting enzyme ("ACE") inhibitors to treat tardive dyskinesia was unpredictable because it concerned the pharmaceutical activity of a compound. Action, pages 3 -4, bridging paragraph. The Action further cites *Fischer* for the proposition that the physiological activity of compositions of adrenocorticotrophic hormones is unpredictable (*id.*), and *In re Wright*, 29 USPQ2d 1570 (Fed Cir, 1993), as holding that the physiological activity of RNA viruses is unpredictable. *Id.* The Action then applies these cases to the present claims with the following assertion: "Likewise, the physiological or pharmaceutical activity of inhibiting the proliferation of vascular smooth muscle cells prior to filing of the instant invention was an unpredictable art." Action, at page 4. Applicants respectfully maintain that the conclusion reached by the Action is a *non sequitor* and does not establish a *prima facie* case of lack of enablement.

As an initial matter, Applicants respectfully point out that the Action cites no cases or art showing that there is any unpredictability in the activity of sEH inhibitors generally or specifically as applied to the case of inhibiting the proliferation of vascular smooth muscle ("VSM") cells, either directly or by raising or maintaining the levels of the substrate metabolized

¹ The Action miscites *Sudilovsky* as being at 27 USPQ2d 1702 (BOPAI 1991). The correct citation is set forth in the text.

by sEH (as noted in the specification at page 2, lines 3-8, EETs converted by sEH to diols. The specification further notes at that place that attenuation of sEH activity causes an increase in EET levels). Nor does the Action present any analysis to show by reasoning that one of skill in this art would not expect other sEH inhibitors to inhibit VSM cell proliferation just as the exemplar sEH inhibitor did in the Examples set forth in the specification. For this reason alone, Applicants submit that the rejection fails to set forth a *prima facie* case and should be reconsidered and withdrawn.

What the Action does do is to try to argue that the various court and Board decisions the Action cites as finding of lack of enablement should be applied to find unpredictability in the case of the claims under examination. The entirety of the Action's explanation for applying these decisions is a single word: "likewise." Thus, the rejection rests on the proposition that the holdings of the cases cited can be applied to the claims under consideration. As noted, the cases cited do not concern VSM proliferation or the action of sEH inhibitors. Thus, the Action must intend that the teachings of the cases are sufficiently close to the situation posed by the claims under examination that the holdings of the cases can be extended to current claims. An examination of the cases cited by the Action, however, reveals that this is not correct.

(a) *Ex parte Sudilovsky*

The closest of the cases cited by the Action to the claims under examination would appear to be the *Sudilovsky* case, which the Action characterizes as showing that treating tardive dyskinesia using ACE inhibitors "involved unpredictable art because it concerned the pharmaceutical activity of [ACE inhibitors]." Action, at page 3, last four lines. As a starting point, Applicants note that the Board in *Sudilovsky* cited *In re Marzocchi*, 169 USPQ 367 (CCPA 1971) in confirming that, before an examiner can reject a claim under §112, first paragraph, the examiner must first show objective evidence or sound scientific reasoning inconsistent with the statements in the specification. *Sudilovsky*, at pages 1703-1704, bridging paragraph. As in the present case, in *Sudilovsky*, the examiner presented no objective evidence to support the

rejection. And, as noted above, the only reasoning supporting the rejection is the term "likewise" to suggest that the conclusions of other cases apply to the present claims. Thus, Applicants respectfully maintain that *Sudilovsky* does not support the present rejection under §112.

On a substantive level, Applicants also maintain that *Sudilovsky* does not support the present rejection. The art cited against the applicant in *Sudilovsky* was U.S. Patent No. 4,652,641, issued to Parsons. According to the opinion, the compounds were described by Parsons as all being angiotensin inhibitors, and Parsons indicated it was because of the activity of some of the compounds as cholecystokinin ("CCK") antagonists that they had effect against dyskinesias. *Sudilovsky*, at 21 USPQ2d 1704, right column. The applicant argued, however, that not all of the Parsons compounds were useful against CCK and that it would not be obvious to the person of skill which of Parsons' compounds would be useful against tardive dyskinesia. *Id.* The Board found that the applicant's arguments "amount to an admission that the state of the art was such that angiotensin inhibitors as a class were not generally recognized as useful against tardive dyskinesia." *Id.* Thus, in *Sudilovsky* the applicant made admissions that not all of the members of the claimed class of inhibitors had the claimed therapeutic activity. No such admission is present with respect to the present case.

It is true that *Sudilovsky* states that "Because there is no evidence of record of analogous activity for similar compounds, the art is relatively unpredictable," *id.*, at page 1705, left column. It is also true, however, that the applicant in *Sudilovsky* did not supply any working examples or experimental evidence to support the effectiveness of ACE inhibitors against the disease. And it is further true that the applicant there relied instead on the teachings of another patent, which did not identify the compound in question as an ACE inhibitor and that there was no similarity between the compound of the patent and the compounds of the applicant's claims. *Sudilovsky*, at page 1705, paragraph bridging left and right columns. It is therefore no surprise that the Board considered it unpredictable that ACE inhibitors would have the claimed effect when no ACE inhibitors were shown to have the effect claimed and the only compound identified as having the effect was neither an apparent ACE inhibitor nor similar to the compounds identified for use in the claimed method. In contrast, the present specification

provides a working example in which an exemplar compound of the claimed class had the effect claimed.

The Action sets forth no reasoning, and no evidence, that there is any unpredictability in inhibiting the proliferation of VSM cells in general or in the effect of sEH inhibitors in inhibiting such proliferation in general, either directly or by raising or maintaining the levels of substrates metabolized by sEH. Applicants therefore maintain that the Examiner has not met his burden under *Marzocchi* to show evidence or reasoning sufficient to doubt the teachings of the specification. For this reason, too, the rejection should be reconsidered, and withdrawn.

(b) *In re Fischer*

The Action cites *In re Fischer*, 166 USPQ18 (CCPA 1970) as supporting the proposition that claims dealing with physiological activity are unpredictable. The claims in *Fischer* related to the "preparation of substances containing adrenocotropic hormones (ACTH) in a composition suitable for injection into human beings in the treatment of certain forms of arthritis." *Fischer*, 166 USPQ at page 20, left column. The §112, first paragraph rejection arose with respect to an open ended recitation by which the claimed ACTHs had no upper limit of activity. While the ACTHs of the invention were said to be the first to have activities from 111% to 230% of a standard potency, the court noted that the claims would give the inventor domination over all compositions "having potencies greater than 1.0, including future compositions having potencies far in excess of those obtainable from his teachings plus reasonable skill." *Id.*, at page 24, left column. The court declined to find that the scope of the claims should extend to embodiments that could not be made given the teachings of the inventor. It is in this context that the court made the statements for which the Action cites it:

In cases involving predictable factors, such as mechanical or electrical elements, a single embodiment provides broad enablement in the sense that, once imagined, other embodiments can be made without difficulty and their performance characteristics predicted by resort to known scientific laws.

In cases involving unpredictable factors, such as most chemical reactions and physiological activity, the scope of enablement varies inversely with the degree of unpredictability of the factors involved.

Fischer, at page 24, left column. The court then concluded that the inventor had not enabled "the preparation of ACTHs having potencies much greater than 2.3." *Id.*

Applicants respectfully submit that the statement of the court set forth above is not properly applied to the claims under examination. First, the Action sets forth no evidence or scientific reasoning to show that there is any unpredictability in either the inhibition of the proliferation of VSM, or in the activity of sEH inhibitors in inhibiting the proliferation of VSM cells, either directly or by raising or maintaining the levels of substrates metabolized by sEH. Second, the specification sets forth assays both for determining whether or not any particular sEH inhibitor does or does not inhibit the proliferation of VSM cells. Thus, even were there some unpredictability in the activity of sEH inhibitors in inhibiting the proliferation of VSM cells, which the Action does not show, the person of skill would still be able to enable to determine which sEH inhibitors fell within the scope of the claims without undue experimentation.

Applicants respectfully maintain that *Fischer* does not support the application of the §112, first paragraph rejection to the claims under examination. The Action has failed to set forth evidence or scientific reasoning to show unpredictability. The rejection should be reconsidered and withdrawn.

(c) *In re Wright*

The Action cites *In re Wright*, 27 USPQ2d 1510 (Fed. Cir. 1993), as holding that the physiological activity of RNA viruses was unpredictable art. The inventor in *Wright* attempted to claim "*any and all* live, non-pathogenic vaccines and processes for making such vaccines, which elicit immunoprotective activity in *any* animal toward *any* RNA virus." *Wright*, at page 1513, right column (emphases in original). The Examiner and the Board, however, relied on a reference, Matthew et al., which the court found adequately supported their position

that the physiological activity of RNA viruses was sufficiently unpredictable that Wright's success in developing one specific avian recombinant virus vaccine at the time the invention was filed "would not have led one of ordinary skill in the art to believe reasonably that all living organisms could be immunized" following Wright's methodology. 27 USPQ2d at pages 1513-14, bridging paragraph.

Thus, the rejection in *Wright* was based on a scientific reference which provided objective evidence to rebut the teachings of the specification, as required by *Marzocchi*. By contrast, the rejection of the claims under examination in this proceeding does not cite a single scientific reference, and contains no reasoning to support its contentions. Moreover, while Wright asserted his invention (developed in 1983) provided a means to vaccinate against any RNA virus in any organism, and thus claimed treatment a large body of heterogeneous viruses in an very large body of organisms, the present claims recite only inhibition of a single cell type using an inhibitor of a single enzyme. And, while the inhibitors can be of several known classes, and can comprise a number of different compounds within each class, including the one currently under election, Applicants point out that all the inhibitors by definition share the same biological activity: inhibition of sEH function. Applicants also again respectfully observe that the Action has provided no evidence or scientific reasoning showing that there is any variability, let alone any unpredictability, in the effect of sEH inhibitors on the proliferation of VSM cells either directly or by raising or maintaining the levels of substrates metabolized by sEH.

2. The Alleged Breadth of the Claims

At page 4, the Action contends that "the claims are very broad due to the vast number of possible compounds [] that are described as being an inhibitor of a soluble epoxide hydrolase." The Action cites *Amgen v. Chugai Pharm Co*, 18 USPQ2d (Fed Cir.), cert denied (1991) in arguing that Amgen explains that very small changes in amino acid sequences of proteins can cause very large changes in the structure-function activity of a protein. Applicants traverse.

Applicants readily concede that the claims encompass a genus of compounds that can function as sEH inhibitors. Applicants observe, however, that all the inhibitors useful in the methods of the invention by definition share the same biological activity: inhibition of sEH function. Applicants do not believe that most of the compounds useful as sEH inhibitors, and especially those of the elected species of derivatives of urea, are peptides, and that the Action's comments regarding small changes in amino acid structure changing the structure-function activity would therefore not be applicable. The larger point that the Action seems to be making, that small changes in the structure in various derivatives of urea might preclude them from acting as sEH inhibitors, would seem better applied to claims to compositions of such derivatives. It has no apparent application to the claims under examination, since any derivative without activity as an inhibitor of sEH is not within the scope of the claims. Applicants respectfully note that the practitioner can readily determine whether any particular urea derivative is or is not an inhibitor of sEH by assays well known in the art prior to the filing date, such as those set forth in U.S. Patent No. 6,150,415 at Example 5, columns 22 -23, and can determine as well whether any particular sEH inhibitor inhibits VSM cell proliferation by the assays taught in the specification. Applicants also respectfully remind the Examiner that a claim is neither indefinite nor unenabled merely because it is broad.

Finally, Applicants respectfully note that the Action asserts that: "The length of the claimed peptide ranges from 7 amino acid residues to 68 amino acid residues in length. For claim 1, only 2 residues of the maximum 68 residues are disclosed. The resulting claims that limit the length of the peptide claims still claim peptides only disclose up to four amino acid residues." Action, at page 4. Applicants are unclear what the quoted language is referring to, since the claims under examination do not refer to amino acid residues, but do not believe it relates to the claims under examination. If the rejection is maintained in the next office action, Applicants respectfully request clarification of this comment so that they can respond appropriately.

3. The Amount of Direction or Guidance Presented and the Presence or Absence of Working Examples

The Action correctly notes that the amount of guidance or direction needed to enable an invention is inversely related to the degree of predictability in the art. The Action cites *Fischer* and *Wright* as indicating that physiological activity is unpredictable. The Action then alleges that the specification provides no guidance for the "entire scope of inhibitor[s] of a soluble epoxide hydrolase other than dodecyl derivatives of urea." Action, at page 5. The Action states this is because it is not clear from the disclosure of one species what other species will work. According to the Action, a disclosure should contain representative examples, which provide reasonable assurance to one skilled in the art that the compounds that fall within the scope of a claim will possess the alleged activity. Action, at pages 5-6.

As an initial matter, "soluble epoxide hydrolase" refers to a specific enzyme. Both the murine and the human form of the enzyme were cloned and sequenced in 1993, almost a decade before the priority date of the present specification. See, specification at page 4, paragraph 16. While other epoxide hydrolases are known, such as cholesterol epoxide hydrolase, leukotriene A₄ hydrolase and microsomal epoxide hydrolase, these enzymes have different substrates and result in different products than those of sEH. See, e.g., U.S. Patent No. 6,150,415, at column 1, lines 29-47. Accordingly, the inhibitors used in the methods of the invention inhibit a specific enzyme, known in the art as sEH. For clarity, the claims have been amended by deleting the word "a" before the term "soluble epoxide hydrolase."

Applicants further note that assays to determine whether or not any particular compound is an inhibitor of sEH was well known in the art prior to the filing date, as shown in the '415 patent at Example 5, columns 22 -23. Further, a considerable number of sEH inhibitors were known in the art before the priority date of the present application. For example, U.S. Patent No. 5,955,496, which issued in 1999, well before the filing date of the present application, observes that: "Suitable epoxide hydrolase inhibitors are compounds providing alternate substrate for the enzyme, lipid alkoxides (e.g., the 9-methoxide of stearic acid), lipophilic diimides (e.g., dicyclhexylcarbodiimide), phenyl glycidols (e.g., SS-4-nitrophenylglycidol), and

chalcone oxides." '496 patent at column 5, lines 55-59. The patent further sets forth 15 exemplary chalcone oxides that were shown to inhibit sEH in at micromolar concentrations. Applicants respectfully remind the Examiner that it is unnecessary for them to restate in the specification that which was known in the art prior to the priority date of the specification.

Further, the inventors published substantial guidance on designing derivatives of urea that function as inhibitors of sEH in the scientific literature before the filing date of the application. See, Morisseau et al., PNAS 96:8849-8854 (1999) (copy attached). The Morisseau publication is referenced in the specification, at page 7, lines 10-12, and is incorporated by reference into the specification by the text at page 24, paragraph 93. The Morisseau reference therefore is and has always legally been a part of the teaching of the specification. The Action fails to take into account the teachings of Morisseau in its evaluation of the guidance the specification provides practitioners, and therefore seriously understates that guidance.

As the Action properly notes, on page 3, the level of skill of persons in this art is high, as the practitioners are typically Ph.D.s or M.D.s. As the Examiner knows, there is an inverse correlation between the level of skill in the art and the amount of guidance that the specification needs to provide to enable practitioners to practice the invention. As shown above, the art teaches a considerable number of sEH inhibitors, provides specific guidance on urea-based sEH inhibitors, and how to determine whether any other compound is an sEH inhibitor. The present specification further teaches a way to assay whether any given sEH inhibitor inhibits VSM cell proliferation. In view of the high level of skill of those in the art, the amount of guidance and the number of working examples are more than sufficient to enable the claims for their scope as presented.

4. The quantity of experimentation

The Action alleges that the undue experimentation would be necessary to practice the invention. Applicants traverse.

The Action correctly notes that the standard for whether any experimentation required to practice the invention is "undue" is not the amount of experimentation, but the type:

whether it is "merely routine" and whether the specification provides guidance on the type of experimentation. Action, at pages 6-7, bridging paragraph. Despite this, the Action states that undue experimentation would be required to practice the invention. But the Action's contains no analysis showing that this is so; rather, it follows its statement of the standard to be followed with a single, conclusory sentence that bears no apparent connection to what preceded it:

For these reasons [which the Action does not articulate], one of ordinary skill would be burdened with undue 'painstaking experimentation study' to determine all of the inhibitor[s] of a soluble epoxide hydrolase that would be enabled in this specification.

One of the elements in determining if experimentation is "routine" or "undue" is the amount of guidance available to the practitioner. This includes, among other things, not only on the information provided expressly in the specification, as appears to have been incorrectly assumed in the Action, but also the information available to persons of skill in the art as of the time of filing of the application in question. As noted in the preceding section, the art teaches a considerable number of sEH inhibitors, and how to determine whether any other compound is an sEH inhibitor, while the present specification teaches how to confirm whether any given sEH inhibitor inhibits VSM cell proliferation. Thus, the practitioner can readily test any particular compound, including any particular derivative of urea, to determine if it functions to inhibit VSM cell proliferation.

The Action appears to have mistaken the number of urea derivatives that might fall within the scope of the claims as support for its contention that it would take "undue 'painstaking experimentation'" to determine inhibitors that fall within the scope of the claims. As the Action itself notes, however, "the test is not merely quantitative, since a considerable amount of experimentation is permissible, if it is merely routine." Thus, the fact that a number of urea derivatives might fall within the scope of the claims does not indicate that the testing of such compounds is not routine. As noted above, the art teaches assays by which any particular compound, including any particular derivative of urea, is an sEH inhibitor, while the present specification teaches how to determine whether any given sEH inhibitor inhibits VSM cell

proliferation. The testing of such compounds is therefore routine. Applicants respectfully note again that the claims are not directed to compositions, and the specification only needs to enable the invention as claimed.

5. Conclusion

As set forth above, the Action fails to set forth a *prima facie* case of lack of enablement. Reconsideration and withdrawal of the rejection is respectfully requested.

B. Rejection of the Claims as Anticipated

1. Rejection of Claim 1 as Anticipated by Rosenquist

The Action rejects claim 1 under 35 U.S.C. §102(b) as anticipated by Rosenquist, U.S. Patent No. 6,025,369 ("Rosenquist"). According to the Action, Rosenquist teaches the use of valproic acid for the treatment of atherosclerosis by inhibiting proliferation of VSM cells. The Action further alleges that valproic acid is a "well-known epoxide hydrolase inhibitor." Action, at page 7. The Action concludes that valproic acid inherently is an epoxide hydrolase inhibitor, and the method taught by Rosenquist inherently anticipates the invention as claimed. Applicants traverse.

The rejection is founded on mistaking the identity of the "epoxide hydrolase" inhibited by valproic acid for the soluble epoxide hydrolase referred to by the claims. As mentioned in a preceding section, the term "soluble epoxide hydrolase" is understood in the art and defined in the specification to refer to a specific enzyme. See, e.g., specification at page 4, paragraph 16. Valproic acid is an inhibitor of a different epoxide hydrolase, microsomal epoxide hydrolase, or "mEH." See, e.g., Kerr et al., Clin. Pharmacol. Ther. 46:82-93 (1989) and Spiegelstein et al., Pharm Res 17:216-21 (2000). (For the Examiner's convenience, copies of the abstracts of these references are attached.) As stated in U.S. Patent No. 5,445,956, at column 1, lines 17-28:

Four principal EH's are known, leukotriene epoxide hydrolase, cholesterol epoxide hydrolase, microsomal EH and sEH (previously called cEH).

The leukotriene EH acts on leukotriene A4, whereas the cholesterol EH hydrates compounds related to the 5,-epoxide of cholesterol . . . The microsomal EH hydrates monosubstituted, 1,1-disubstituted epoxides, cis-1,2-disubstituted epoxides and epoxides on cyclic systems. The more abundant soluble EH hydrates a wide range of epoxides not on cyclic systems.

(Emphasis added). Thus, the "epoxide hydrolase" inhibited by valproic acid is not the same enzyme as the sEH recited by the claims under examination, and acts on different substrates to produce different diols.

The rejection of claim 1 over Rosenquist is based on the incorrect assumption that valproic acid is an inhibitor of sEH. As known in the art, it is instead an inhibitor of a separate enzyme in the epoxide hydrolase family, mEH. Accordingly, the Rosenquist reference fails to contain every element of the invention as claimed, as required to constitute a proper reference under §102(b). The rejection of claim 1 as anticipated by Rosenquist should be reconsidered and, upon reconsideration, withdrawn.

2. Rejection of Claims as Anticipated by Hammock et al.

The Action rejects claims 1, 2, and 4 under §102(b) as anticipated by Hammock et al., WO 00/48593 ("Hammock"). According to the Action, Hammock teaches the administration of an sEH inhibitor for the treatment of inflammation. The Action argues that, although Hammock is silent about inhibiting the proliferation of VSM in a subject, inhibition of the proliferation of VSM cells would inherently occur in administering the dosages taught in Hammock. Applicants amend in part and traverse.

Claim 1 has been amended to recite that the subject to whom the sEH inhibitor is administered has had a heart attack, has had a coronary bypass, has been diagnosed with decreased circulation to the heart, has undergone angioplasty, has an endovascular stent, has a hemodialysis graft, or has a vascular graft. The statements referred to by the Action do not appear to teach or to suggest administration of sEH inhibitors to these subjects.

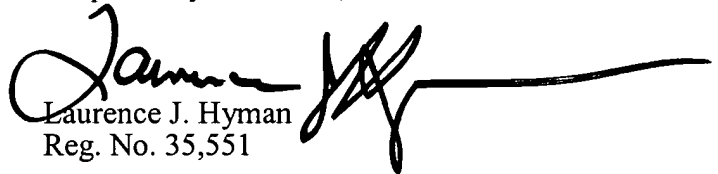
Accordingly, reconsideration and withdrawal of the rejection is respectfully requested.

CONCLUSION

In view of the foregoing, Applicants believe all claims now pending in this Application are in condition for allowance. The issuance of a formal Notice of Allowance at an early date is respectfully requested.

If the Examiner believes a telephone conference would expedite prosecution of this application, please telephone the undersigned at 415-576-0200.

Respectfully submitted,


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Attachments: Morisseau et al., PNAS article
Kerr abstract
Spiegelstein abstract

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